

Serial Number: 10/020,481

Docket Number: 01CXT0147N

REMARKS

Upon entry of this Response, claims 1-18 remain pending in the present application. Claims 1, 2, 5, 7, 8, and 9-18 have been amended, and claims 19 and 20 has been canceled herein. Applicant requests reconsideration of the pending claims in view of the following remarks.

In item 1 of the Office Action, the specification has been objected to for the informalities noted. An appropriate replacement paragraph is presented herein to address this objection. Accordingly, Applicant requests that the objection to the specification be withdrawn.

In addition, in item 2 of the Office Action, several claims have been objected to for various formalities. Appropriate amendments have been made to such claims, or the claims have been canceled herein, thereby rendering this objection moot with respect to such claims. Accordingly, Applicant requests that the objection to these claims be withdrawn.

Next, in item 3 of the Office Action, claims 1, 4, 9, 11, 12, 17, and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,661,786 issued to Abbiate et al. (hereafter "*Abbiate*"), in view of U.S. Patent 6,801,525 issued to Bodnar et al. (hereafter "*Bodnar*"). Claim 19 has been canceled herein, thereby rendering this rejection moot with respect to such claim. For the reasons that follow, Applicant asserts that the cited combination of references fails to show or suggest each of the elements of claims 1, 4, 9, 12, 16, and 17. Accordingly, Applicant respectfully requests that the rejection of these claims be withdrawn.

To begin, claim 1 as amended recites as follows:

1. A method for preventing cell loss during switch-over in a redundant switch fabric comprising the steps of:
  - receiving an inbound cell in an ingress buffer;
  - dispatching copies of said inbound cell stored in said ingress buffer to a plurality of switch fabric elements, wherein the inbound cells are retained in the ingress buffer after the copies of the inbound cells are forwarded to the switch fabric elements;
  - receiving said cell copies in said plurality of switch fabric elements;
  - forwarding an outbound cell from a designated active switch fabric element to an egress buffer;

Serial Number: 10/020,481

Docket Number: 01CXT0147N

receiving a redesignation of the active switch fabric element during a switch over;  
forwarding an outbound cell from the redesignated active fabric switch element to the egress buffer; and  
dispatching an outbound cell from the egress buffer.

With respect to claim 1, the office Action states:

"Referring to Figure 2, Abbiate discloses a port adapter (an input line card) that receives an inbound cell.

However, Abbiate does not disclose an input line card that has a buffer to store inbound cells.

Referring to Figure 2, Bodnar discloses an ingress side 201 of a line card 200 that has a memory to store inbound cells (claims 1 and - receiving an inbound cell in an ingress buffer).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify an input line card of Abbiate to include a buffer to store inbound cells, as shown by Bodnar, so that cells can be transmitted to switch fabrics at a desired rate." (Office Action, pages 3-4.).

Applicant asserts that *Bodnar* fails to show or suggest the use of a memory to store inbound cells as set forth in claim 1 above. In particular, item 201 represents an input function of a line card in FIG. 2. The input function 201 includes a line interface 203 and an IP engine with a memory denoted by reference number 207. The memory of the IP engine is not an ingress buffer as contended above. Specifically, the memory is employed to store addressing information so that incoming packets may be quickly routed to outgoing circuits through the switching fabric 210. In this respect, the memory of the IP engine 207 is not a buffer, but only stores addressing information that may be consulted by the IP engine in order to route packets through the switching fabric quickly.

In situations where an address of a given packet received does not match any of the addresses stored in the memory of the IP engine, then special steps are taken to route the packet to a special line card (see FIG. 2) so that the proper destination address may be determined and the packet routed accordingly. This is done so that the operation of the line card itself is not slowed by packets with unknown addresses.

In this respect, at column 3, lines 34-54, *Bodnar* states:

"When an indeterminate packet arrives at line card 200, this packet cannot be routed by the IP engine 207, and it is therefore routed

Serial Number: 10/020,481

Docket Number: 01CXT0147N

over path 211 in fabric 210 to the default router 220, and therein, to the fabric interface 231 of the special line card 220 output function 222, where it is placed in the output buffer 228. The processor 229 examines the packet. If the packet is a routing table update packet, it updates the memory 226. If the packet is an IP data packet, it determines the final route, updates the memory 226, sends the packet over data path 233 to input function 221, and schedules the packet for routing by the IP engine 224 via fabric interface 232 and, over switched path 211 network fabric 210. Also, update information is sent to line card 200 so as to update memory of the routing engine 207. If the processor can not determine the route, it will prepare a query to other routers for information about the address and schedule this to be routed by the BGP engine. If the query is successful, the processor 229 will update the memory 226 and schedule the packet to be processed by the IP engine 224. If the Processor 229 still can not route the packet, it is dropped."

*Bodnar* does not disclose an "ingress side 201 of a line card 200 that has a memory to store inbound cells." In addition, claim 1 has been amended herein to recite that the inbound cells are retained in the ingress buffer after the copies of the inbound cells are forwarded to the switch fabric elements. In contrast, *Bodnar* discloses forwarding cells received to the switch fabric and the content of the cells is not retained in any ingress buffer as set forth in claim 1.

Claim 1 as amended reflects the fact that inbound cells are retained at the ingress buffer so as to ensure that they are fully received at the egress buffer before they are deleted as is set forth in the present specification. In this manner, the cells are thus stored to prevent a loss of cells when switching from one switch element in the switch fabric to a second switch element as might occur as set forth in the present specification.

Thus, Applicant asserts that the cited combination of references fails to show or suggest each of the elements of claim 1 as amended. In addition, Applicant asserts that the cited combination of references fails to show or suggest each of the elements of claims 9 and 17, to the extent that they incorporate subject matter similar in scope with the amended matter of claim 1. Accordingly, Applicant respectfully requests that the rejection of these claims be withdrawn. In addition, Applicant requests that the rejection of claims 4, 11, and 12 be withdrawn as depending from claims 1 and 9.

Serial Number: 10/020,481

Docket Number: 01CXT0147N

Next, claims 2, 3, 7, 10, 14, and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Abbate* in view of *Bodnar* and further in view of U.S. Patent 6,906,999 B1 issued to Schulz (hereafter "*Schulz*"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP §2143.03, *In re Rijckaert*, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). As an initial matter, it is noted that claim 20 has been canceled herein, thereby rendering this rejection moot with respect to such claim. In addition, it is noted that claims 2, 3, and 7 depend from independent claim 1, and claims 10 and 14 depend ultimately from claim 9. Accordingly, Applicant asserts that the cited combination of references above fails to show or suggest each of the elements of claims 2, 3, 7, 10, and 14 for the same reasons discussed above with reference to claims 1 and 9. Therefore, Applicant respectfully requests that the rejection of these claims be withdrawn.

Finally, claim 18 has been rejected under 35 U.S.C. §103(a) as being unpatentable over *Abbate* in view of *Bodnar* and further in view of U.S. Patent 6,385,209 B1 issued Skirmont et al. (hereafter "*Skirmont*"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP §2143.03, *In re Rijckaert*, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). Applicant notes that claim 18 ultimately depends from claim 17 discussed above. Applicant asserts that the cited combination of references fails to show or suggest each of the elements of claim 18 as depending from claim 17. Accordingly, Applicant requests that the rejection of claim 18 be withdrawn.

Next, in item 4 of the Office Action claims 5, 6, 8, 13, and 15 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Claims 5, 8, 13, and 15 have been amended herein so as to appear in independent form incorporating the subject matter of any base claim and any intervening claims from which they depended. In addition, it is noted that claim 6 depends from claim 5. Accordingly, Applicant respectfully requests that the rejection to claims 5, 6, 8, 13, and 15 be withdrawn.

Serial Number: 10/020,481

Docket Number: 01CXT0147N

In addition, several ones of the claims have been amended so as to provide for antecedent basis where found lacking and so as to ensure compatibility among the various related claims. In addition, some of the claims have been amended to provide for greater technical accuracy.

### **CONCLUSION**

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding this Response, the Examiner is encouraged to telephone the undersigned counsel of Applicant.

Respectfully submitted,



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